

Solvay Minerals, Inc.
Dispersion Model Information

New 440 309.841 526 502.2
All 1654 70.740 15.148 14.462

AQD #	Name	Stack Height		Inside Diameter		Exit Temperature		Exit Velocity		NOX	SO2	CO	VOC	M202	H2S	Hr/Yr	Emissions Rate (g/s)				
		feet	meters	feet	meters	F	K	Ft/sec	m/s	PPH	PPH	PPH	PPH	PPH	PPH		PM10		NOx		
																	Short	Long	Short	Long	
2a	ore crusher	23	7.01	3.48	1.06	68	293.2	52.00	15.85	0	0	0	0			8760	0.202	0.202			
2b	ore reclaim	38	11.58	1.08	0.33	68	293.2	91.00	27.74	0	0	0	0			8760					
6a	top silos	133	40.54	1.75x2.0	0.64	96	308.7	82.00	24.99	0	0	0	0			8760	0.038	0.038			
6b	silos reclaim	15.5	4.72	2.15x1.78	0.67	75	297.0	33.00	10.06	0	0	0	0			8760	0.064	0.064			
7	PLO	82	24.99	2.4x1.99	0.75	68	293.2	64.00	19.51	0	0	0	0			8760	0.151	0.151			
8	coal unloading	AREA SOURCE?									0	0	0	0			1312	0.806	0.121		
9	coal storage	AREA SOURCE?									0	0	0	0			8760	0.050	0.050		
10	coal crushing	13.3	4.05	1.63x1.88	0.60	68	293.2	18.00	5.49	0	0	0	0			8760	0.076	0.076			
11	Coal transfer	35.3	10.76	1.44x1.75	0.55	68	293.2	21.00	6.40	0	0	0	0			8760	0.026	0.026			
14	boiler coal bunker	125	38.10	1.42	0.43	68	293.2	57.00	17.37	0	0	0	0			8760	0.047	0.047			
15	DR 1&2	180	54.86	6	1.83	165	347.0	49.00	14.94	1.2	0	0	0			8760	0.857	0.857	0.151	0.151	
16	product classifier	126	38.40	3.5	1.07	205	369.3	42.00	12.80	0	0	0	0			8760	0.113	0.113			
17	CA 1&2	180.5	55.02	12	3.66	375	463.7	44.00	13.41	30	0	1524	440	32.1		8760	2.810	2.810	3.780	3.780	
18	BO-1	180.5	55.02	7.25	2.21	125	324.8	58.00	17.68	245	70	17.5	0.5			8760	1.260	1.260	30.870	30.870	
19	BO-2	180.5	55.02	7.25	2.21	120	322.0	60.00	18.29	245	70	17.5	0.5			8760	1.260	1.260	30.870	30.870	
24	boiler fly ash silo	25	7.62	1	0.30	83	301.5	41.00	12.50	0	0	0	0			8760	0.038	0.038			
25	AT crush and screen	76	23.16	3.0x1.5	0.73	68	293.2	48.00	14.63	0	0	0	0			8760	0.126	0.126			
26	AT Dryer	67	20.42	3.0x1.5	0.73	100	310.9	58.00	17.68	0.05	0	0.07	0			8760	0.139	0.139	0.006	0.006	
27	AT Bagging & Loadout	60	18.29	1.3x1.5	0.48	68	293.2	62.00	18.90	0	0	0	0			8760	0.063	0.063			
28	Fluid Bed Dryer	140	42.67	4	1.22	165	347.0	40.00	12.19	0	0	0	0			8760	0.365	0.365			
30	Lime Bin #1	88	26.82	0.66	0.20	43	279.3	59.00	17.98	0	0	0	0			8760	0.025	0.025			
31	Lime Bin #2	88	26.82	0.66	0.20	43	279.3	59.00	17.98	0	0	0	0			8760	0.025	0.025			
33	Sulfur Burner	100	30.48	2	0.61	150	338.7	35.00	10.67	1.5	0.4	0	0			8760			0.189	0.189	
35	Sulfite Dryer	103	31.39	2.29	0.70	129	327.0	48.00	14.63	0	0	0	0			8760	0.176	0.176			
36	Sulfite Bin #1	60	18.29	0.49	0.15	149	338.2	84.90	25.88	0	0	0	0			8760	0.013	0.013			
37	Sulfite Bin #2	60	18.29	0.49	0.15	149	338.2	84.90	25.88	0	0	0	0			8760	0.013	0.013			
38	Sulfite Bin #3	60	18.29	0.49	0.15	149	338.2	84.90	25.88	0	0	0	0			8760	0.013	0.013			
39	Sulfite Bin #4	60	18.29	0.49	0.15	149	338.2	84.90	25.88	0	0	0	0			8760	0.013	0.013			
40	Sulfite Bagging	60	18.29	1	0.30	149	338.2	51.00	15.54	0	0	0	0			8760					
41	Sulfite Loadout	70	21.34	1	0.30	149	338.2	70.00	21.34	0	0	0	0			8760	0.024	0.024			
43	Sulfur Storage Tank	AREA SOURCE?									0	0	0	0			10	259			
44	Lime Unloading	30	9.14	1.51	0.46	43	279.3	61.00	18.59	0	0	0	0			8760	0.113	0.113			
45	AT Transloading	17.8	5.43	0.9	0.27	68	293.2	29.00	8.84	0	0	0	0			8760	0.025	0.025			
46	Trona Transfer	12.5	3.81	2.2	0.67	68	293.2	46.00	14.02	0	0	0	0			8760	0.089	0.089			
47	Exp Crusher	125	38.10	4.5	1.37	68	293.2	45.00	13.72	0	0	0	0			8760	0.365	0.365			
48	CA-3	180	54.86	10.5	3.20	350	449.8	32.00	9.75	15	0	762	320	9.24		8760	1.172	1.172	1.890	1.890	
50	Dryer Area	180	54.86	4.5	1.37	200	366.5	27.00	8.23	0	0	0	0			8760	0.175	0.175			
51	DR-5	180	54.86	8	2.44	300	422.0	33.00	10.06	18	0	2.4	0.27			8760	0.605	0.605	2.268	2.268	
52	Silo Top #2	141	42.98	1.5	0.46	68	293.2	50.00	15.24	0	0	0	0			8760	0.063	0.063			
53	Silo Bottom #2	30	9.14	2.8	0.85	68	293.2	36.00	10.97	0	0	0	0			8760	0.113	0.113			
54	T-200 Silo	64.2	19.57	0.59	0.18	68	293.2	79.00	24.08	0	0	0	0			8760	0.024	0.024			
55	Ore recycle/reclaim	64	19.51	1.3	0.40	68	293.2	50.00	15.24	0	0	0	0			8760	0.050	0.050			
62	Carbon Silo	91	27.74	0.5	0.15	68	293.2	85.00	25.91	0	0	0	0			8760	0.016	0.016			
63	Perlite Silo	58	17.68	0.5	0.15	68	293.2	102.00	31.09	0	0	0	0			8760	0.021	0.021			
64	Sulfite Blending #2	15	4.57	0.5	0.15	68	293.2	96.00	29.26	0	0	0	0			8760	0.019	0.019			
65	Sulfite Blending #1	35	10.67	0.75	0.23	68	293.2	15.00	4.57	0	0	0	0			8760	0.025	0.025			
66	Carbon/Perlite Scrubber	125	38.10	1	0.30	68	293.2	75.00	22.86	0	0	0	0			8760	0.113	0.113			
67	Bottom Ash	125	38.10	1.5	0.46	100	310.9	33.00	10.06	0	0	0	0			8760	0.038	0.038			
68	Bagging Trona Silo	82	24.99	1667x0.97	0.37	68	293.2	77.00	23.47							8760	0.045	0.045			
70	Bagging Sulfite Silo	82	24.99	6250x0.84	0.40	68	293.2	49.00	14.94							8760	0.034	0.034			
71	Bagging MBS Silo	82	24.99	6250x0.84	0.40	68	293.2	49.00	14.94							8760	0.034	0.034			
72	MBS Soda Ash Feed	60.67	18.49	0.6667	0.20	200	366.5	53.00	16.15							8760	0.014	0.014			
73	MBS Dryer	95	28.96	2	0.61	90	305.4	56.00	17.07	0.15	0.77					8760	0.151	0.151	0.019	0.019	

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SC Minerals, Inc.
Dispersion Model Information

AQD #	Name	All 1654															Emissions Rate (g/s)			
		Stack Height		Inside Diameter		Exit Temperature		Exit Velocity		NOX	SO2	CO	VOC	M202	H2S	Hr/Yr	PM10		NOx	
		feet	meters	feet	meters	F	K	Ft/sec	m/s	PPH	PPH	PPH	PPH	PPH	PPH		Short	Long	Short	Long
New expansion sources																				
74	North Headframe	105	32.00	1.33	0.41	60	288.7	59.68	18.19							8760	0.043	0.043		
75	Primary Crushing	25	7.62	1.33	0.41	60	288.7	59.68	18.19							8760	0.043	0.043		
76	Primary Screening	25	7.62	4.42	1.35	60	288.7	58.75	17.91							8760	0.466	0.466		
77	Transfer BH 101	40	12.19	1.08	0.33	60	288.7	58.77	17.91							8760	0.028	0.028		
78	Transfer BH 102	70	21.34	1.25	0.38	60	288.7	54.32	16.56							8760	0.034	0.034		
79	Transfer Point	70	21.34	1.08	0.33	60	288.7	54.25	16.54							8760	0.026	0.026		
80	Calcliner #4 ESP	180	54.86	9.83	3.00	338	443.2	57.93	17.66	20		1048	440	29.4		8760	1.503	1.503	2.520	2.520
81	Product Dryer Area BH	180	54.86	3.58	1.09	250	394.3	57.85	17.63							8760	0.219	0.219		
82	Dryer #6 ESP	180	54.86	7.08	2.16	305	424.8	58.37	17.79	30		14	0.27			8760	0.514	0.514	3.780	3.780
83	Silo Top	130	39.62	1.42	0.43	200	366.5	56.03	17.08							8760	0.037	0.037		
84	Silo Bottom	50	15.24	2.00	0.61	200	366.5	58.35	17.79							8760	0.074	0.074		
85	Package Boiler Stack	140	42.67	3.00	0.91	325	435.9	50.00	15.24	1.9	0.03	4.5	0.14			8760	0.060	0.060	0.239	0.239
Non-permitted, odd-ball sources																				
MV	Mine Vent		0.00		0.00		255.4		0.00			7.5				8760				
CTH	Cooling Tower High Flow	15	4.57		0.00	68	293.2		0.00							8760	2.155	2.155		
CTL	Cooling Tower Low Flow	15	4.57		0.00	68	293.2		0.00							8760	0.790	0.790		
FRP	Fire Pump	10	3.05	0.25	0.08	500	533.2		0.00	8.8	0.4	2	0.8			500	0.101	0.006	1.109	0.063
GND	C/S Generator	10	3.05	0.17	0.05	500	533.2		0.00	4.8	0.4	1.2	0.4			500	0.050	0.003	0.605	0.035
GNS	Steam Plant Generator	15	4.57	0.33	0.10	500	533.2		0.00	104	7.2	22.4	10.4			500	0.907	0.052	13.104	0.748
PB	Pony Boiler	12	3.66	0.83	0.25	500	533.2		0.00	4	1.2	0.8	0.04			500	0.050	0.003	0.504	0.029

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